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REMARKS

This Supplemental Amendment After Final is filed to correct informalities to simplify issues for an appeal filed June 25, 2002 for the above-identified application. In particular, in the Final Office Action of March 26, 2002, claims 1-15 were rejected under 35 U.S.C. § 112, Second Paragraph on the basis of the phrases "individual components" and "each stack of components". Applicants have amended claims 1-15 to clarify the subject matter of Applicants' invention and entry of the proposed amendments after final are respectfully requested to present the claims in better condition for appeal.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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MARKED-UP VERSION OF REPLACEMENT CLAIMS

1. (Thrice Amended) An apparatus for assembling components of a data storage device comprising:

- a frame;
- a carousel base rotationally coupled to the frame;
- a carousel coupling device to removably couple a component carousel including a plurality of assembly components to the carousel base;
- an assembly arm movably coupled to the frame; and
- a driver coupled to the assembly arm to move the assembly arm between the carousel base and an unassembled data storage device to sequentially unload ~~individual~~ the plurality of assembly components from the component carousel and assemble the unloaded assembly components into the data storage device.

2. (Thrice Amended) The apparatus of claim 1 wherein the component carousel supports a plurality of stacks of the plurality of assembly components at spaced locations arranged about a center point and the apparatus comprises:

- a motor coupled to the carousel base to rotationally position each the plurality of stacks of assembly components for assembly.

3. (Thrice Amended) The apparatus of claim ~~2~~ 1 wherein the carousel coupling device comprises a vacuum source operably coupled to the rotatable carousel base to supply vacuum pressure in an engaged mode to secure the component carousel to the carousel base and to release the vacuum pressure to remove the carousel.

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4. (Thrice Amended) The apparatus of claim 2 further comprising an indexer coupled to the carousel base to align individual components from the plurality of stacks of the plurality of assembly components relative to the assembly arm.

5. (Thrice Amended) The apparatus of claim 2 and including a carousel coupled to the carousel base and a plurality of elongated components container configured to contain a the plurality of assembly components and the carousel includes a plurality of latch assemblies to removably secure the plurality of containers at spaced locations about a rotation axis of the carousel base.

11. (Thrice Amended) The apparatus of claim 1 wherein the apparatus is adapted to assembly components of a disc stack ~~supported by~~ of a spindle motor and further comprising:

- a plurality of carousel bases including a carousel base adapted to support a component carousel for discs and a carousel base adapted to support a component carousel for spacers;
- a plurality of assembly arms including an assembly arm coupled to the carousel base supporting the component carousel for discs to assemble ~~the discs~~ and an assembly arm coupled to the carousel base supporting the component carousel for spacers to assemble the spacers;
- a plurality of drivers coupled to the plurality of assembly arms to move the plurality of assembly arms between the plurality of carousel bases and a loading station; and
- a controller coupled to the plurality of drivers ~~of the assembly arm~~ to coordinate operation of the

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plurality of assembly arms to alternately assemble
the discs and the spacers.

13.(Thrice Amended) The apparatus of claim 12 wherein the disc containers house a disc stack including a plurality of coaxially aligned unassembled discs and further comprises an indexer to incrementally position the carousel base removably supporting the carousel for discs to sequentially unload individual discs in the disc stack of unassembled discs.

15.(Thrice Amended) The apparatus of claim 14 further comprising an index rod operably coupled to the component carousel for spacers to push the spacers towards an extended end of the spacer posts for assembly.

21.(Twice Amended) An assembly apparatus comprising:
an assembly arm and assembly arm driver operably coupled to the assembly arm to operate the assembly arm to unload components from the assembly apparatus and load components in ~~the~~ an unassembled device; and means for intermittently stocking the assembly apparatus with a supply of the components for assembly by the assembly arms.

22.(Amended) The apparatus of claim 6 wherein the apparatus includes a detector and the assembly arm is coupled to a controller which is configured to shift operation of the assembly arm from one of the multiple carousels to another of the multiple carousels supported on the plurality of carousel bases based upon feedback from the detector.

23.(Amended) An assembly apparatus comprising:
a frame;

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a plurality of carousel bases rotationally coupled to the frame;

an assembly arm movably coupled to the frame;

an assembly arm driver coupled to the assembly arm to operate the assembly arm to unload components from carousels coupled to the plurality carousel bases; and

a controller operably coupled to the assembly arm and configured to sequentially operate the assembly arm between the plurality of carousel bases.

25. (Amended) The apparatus of claim 24 ~~wherein~~ 23 wherein the disc carousels removably support a plurality of disc containers including a plurality of stacked discs.